



# Community Involvement Plan: Stay informed and Involved

This Community Involvement Plan, or CIP, is the updated strategy for involving community members in the cleanup of the Portland Harbor Superfund site. This plan is a collaborative effort between EPA Region 10 and the Oregon Department of Environmental Quality (ODEQ). Activities in this plan will be used to make sure we remain in regular contact with everyone interested in the site. The CIP is the result of feedback from community meetings, interviews and presentations held in 2012.

Community involvement has played a vital role at the site and will continue to do so in the future. This plan

Together, we have moved through the stages of Superfund cleanup. As of 2013, the EPA is currently reviewing cleanup options for the site. EPA plans to release a draft cleanup plan for public comment in 2014.

Our goal is to make sure we consistently provide opportunities for people to share their ideas, concerns and priorities. Ongoing community discussions will help make sure issues and concerns are part of the Superfund process. We look forward to continuing to work with you to strengthen healthy communities and advance environmental protection.

## EPA and Community Involvement

This community involvement plan is a strategy to help promote meaningful community involvement throughout the cleanup of the Portland Harbor Superfund site. It specifies planned activities to address community needs, concerns and expectations

The plan is a working document. It is updated as community concerns become known and more information about the site becomes available.

## What's Inside

Sections		Appendices	
The Site: At a Glance.....	2	A: Superfund Community Involvement Activities	
A Closer Look.....	3	B: The Superfund Process	
Community Background.....	5	C: Area Context and History	
What We Have Heard So Far.....	7	D: Cleanup Work to Date	
Community Involvement Objectives.....	9	E: Acronyms	
Community Involvement Activities.....	9	F: Glossary of Terms	
Project Roles and Responsibilities.....	14	G: Additional Information Resources	
What's Next in the Cleanup Process.....	16		

## The Site: At a Glance

### Where Is the Portland Harbor Site?

The study area is a contaminated 11 river-mile-long section of the Willamette River between Broadway Bridge in downtown Portland and the Columbia Slough.

### What Happened?

More than a century of industrial uses left areas of Portland Harbor contaminated with different hazardous substances. They include polychlorinated biphenyls (PCBs), heavy metals, polynuclear aromatic hydrocarbons (PAHs), dioxin/furans and pesticides.

### Why Are We Cleaning It Up?

The EPA evaluated studies to determine if people and wildlife may be exposed to contamination at the site and, if so, whether the possibility of harmful effects is great enough that a cleanup is needed. The EPA has determined that risks posed by the Portland Harbor site are high enough to take action.

Eating Portland Harbor resident fish such as bass, catfish and carp, is a health risk, especially for subsistence fishers and infants breast fed by mothers who eat resident fish. PCBs are the primary contaminant associated with most of the risk from eating Portland Harbor fish.

### What Is Going on Now?

The EPA is reviewing options to clean up Portland Harbor. These options are presented in a document called the feasibility study. After the study has been

finalized, the EPA will develop a proposed cleanup plan, which is anticipated in 2014. This Proposed Plan will review cleanup options and propose a preferred course of action for cleaning up Portland Harbor. After carefully considering public input on the Proposed Plan, the EPA will issue a Record of Decision (ROD) selecting a remedy for the site. The ROD likely will not be in place before 2015.

Cleanup of the river will be coordinated with cleanup and pollution control efforts on land-based properties that are sources of river contamination. ODEQ is overseeing these efforts. Until then, the EPA and ODEQ will continue to meet with the public to provide updates, answer questions and listen to community concerns.

### What Are the Project's Goals?

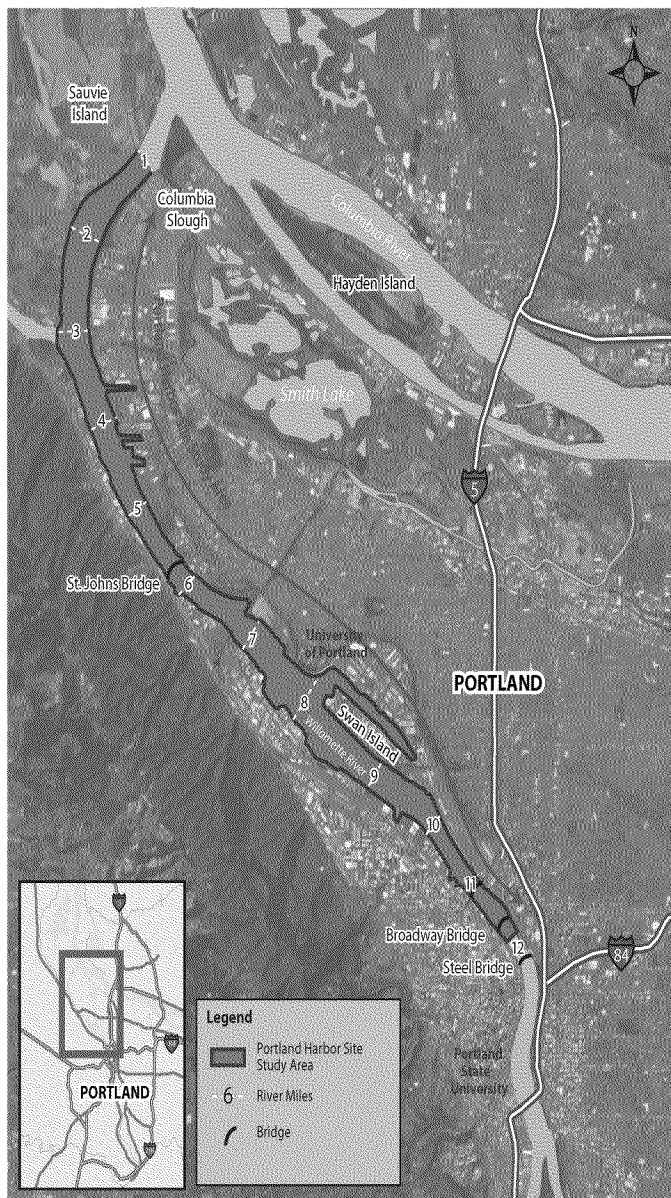
- Clean up contaminated sediment and decrease pollution sources to reduce the risk for people eating resident fish from the lower Willamette River and for wildlife and fish in the area.
- Provide better habitat for wildlife and fish and coordinate cleanup actions with habitat restoration projects in the lower Willamette River.
- Allow recreational and other river uses that also continue to support navigation, industry, commerce and jobs in Portland Harbor.

### EPA and ODEQ Contacts

Contact us if you have questions or need more information about this plan or the Portland Harbor site:

- Alanna Conley, EPA Community Involvement Contact: (503) 326-6831 | [conley.alanna@epa.gov](mailto:conley.alanna@epa.gov)
- Chip Humphrey, EPA Project Manager: (503) 326-2678 | [humphrey.chip@epa.gov](mailto:humphrey.chip@epa.gov)
- Marcia Danab, ODEQ Community Involvement Contact: (503) 229-6488 | [danab.marcia@deq.state.or.us](mailto:danab.marcia@deq.state.or.us)
- Jim Anderson, ODEQ Project Manager: (503) 229-6825 | [anderson.jim@deq.state.or.us](mailto:anderson.jim@deq.state.or.us)

To learn more, visit the EPA's Portland Harbor Web page at [www.epa.gov/region10/portlandharbor](http://www.epa.gov/region10/portlandharbor) or ODEQ's Web page for information on source control at [www.deq.state.or.us/lq/cu/nwr/portlandharbor](http://www.deq.state.or.us/lq/cu/nwr/portlandharbor).

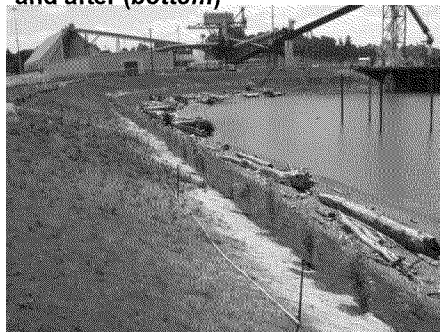


## A Closer Look

The Portland Harbor Superfund site study area is located on the lower Willamette River, between the Broadway Bridge in downtown Portland and the Columbia Slough, approximately where the Willamette and Columbia Rivers meet. The working Portland waterfront is heavily industrialized and zoned primarily for commercial and industrial uses.

In addition to industrial activities Tribal fishing for both subsistence and ceremonial purposes has occurred historically and it continues to be a key activity along the river. Other people also use the river for subsistence fishing. **Subsistence fishing** refers to fishing, other than sport fishing, that

Early action cleanup of the ~~Terminal 4~~ of the Portland Harbor site in Portland Harbor, before (top) and after (bottom)



**REMOVE  
PHOTOS  
BELOW**

provides a source of food, up to a substantial source of food for the fisher or the fishers' family. People fish in Portland Harbor from boats and from locations along the banks. Many fish species such as salmon and steelhead migrate through Portland Harbor and the Willamette River. Unlike migratory fish, **resident fish**, such as bass, catfish and carp, may spend their entire life cycle in Portland Harbor.

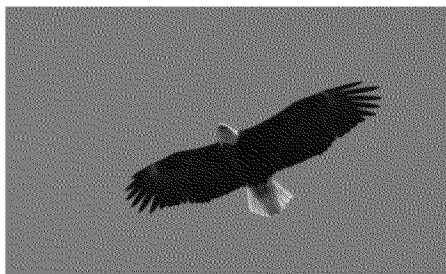
Fish-eating birds, migratory waterfowl and raptors seasonally visit the lower Willamette River. Swimming, boating and community recreational events are other uses that bring people in contact with Portland Harbor. Transient communities, which spend a short time in an area, have also been observed living along some riverbank areas.

In December 2000, the EPA added Portland Harbor to the Superfund program's National Priorities List of contaminated sites based on the results of a 1997 sediment sampling study. The list identifies the nation's most contaminated sites. Hazardous substances currently found at Portland Harbor are harmful to humans, fish and wildlife. The EPA has focused on evaluating the risks posed at the site and determined that there is a risk to public health from eating resident fish.

Since several years prior to the listing, ODEQ has been cleaning up sources of contamination at industrial sites along the banks of the river. Appendix C and Appendix D provide more information about these early action cleanup areas.

Appendix G for fact sheets about Portland Harbor.

For additional background information, please see



**Wildlife in Portland Harbor**



## Community Background

Diverse neighborhoods, organizations, schools, businesses, religious institutions, the University of Portland, and government offices are located within a 5-mile radius of the Portland Harbor site. Twenty-four percent of people living within 5 miles of

Portland Harbor are minorities; fifteen percent of homes are non-English speaking households. Area neighborhoods include Spanish-speaking, Vietnamese and Russian/Slavic communities.

Community Data		
	5-Mile Radius	Portland, Oregon (Multnomah County)
Race % Minority	24%	30%
Race % White	80%	81%
Speak English Only	85%	81%
Non-English Spoken at Home	15%	19%
Age of Population (less than 18 years old)	24%	21%
Education (High School Diploma)	16%	21%
Per Capita Income	\$34,383	20%
Household Income Less Than \$15,000	14%	\$28,883
Title 1 Public Schools	12	14%
<i>Source: U.S. Census Bureau, American Community Survey (ACS) 2006-2010</i>		

### Portland Harbor Community Advisory Group (CAG)

A group of interested citizens and organizations formed a Community Advisory Group, or CAG, for the Portland Harbor site. The Portland Harbor CAG provides a public forum for community members to learn about the site and share community needs and concerns. The CAG also assists EPA Region 10

and ODEQ in making decisions on how to clean up the site by offering a valuable opportunity to hear and consider community perspectives on site plans and activities.

### Participate in future Portland Harbor CAG meetings

- Contact CAG Chair Jim Robison at 503-285-4805 or [jim@jimrobison.org](mailto:jim@jimrobison.org).
- Attend a CAG meeting held on the second Wednesday of every month at 6:00 p.m. at the Water Pollution Control Laboratory at 6543 North Burlington Avenue, under the St. Johns Bridge. All CAG meetings are open to the public. Sign up to receive email invitations and meeting agendas at [bit.ly/ptIndhrbr](http://bit.ly/ptIndhrbr).

### Other Community Partners

We recognize that there are community members and organizations not represented on the CAG. Therefore, it is important that we reach out regularly to others interested in the Portland Harbor site to be sure we hear their ideas and concerns. Some of the community groups that we have connected with include the Portland Harbor Coalition, the Latino Network, the Slavic Immigrant Association, Ecumenical Ministries Oregon, the Coalition of Black Men, Oregon Environmental Justice Task Force, and North Portland neighborhood associations. We will also use public information sessions, fact sheets, websites, one-on-

one discussions, and participation in community events as ways to share information with the broader community. If you are aware of specific community needs near the site, please let EPA and ODEQ know. We can translate and publish material in local media, host informal meetings, and meet one-on-one to make sure people's concerns are heard and that people are up to date on the site's status. Please refer to page nine for more information.

### Willamette Riverkeeper

The Willamette Riverkeeper has been a community resource, sharing information and reaching out to the public about Portland Harbor cleanup activities. The EPA advertised the availability of a technical assistance grant in December 2000 and awarded it to the Willamette Riverkeeper in August 2001. The

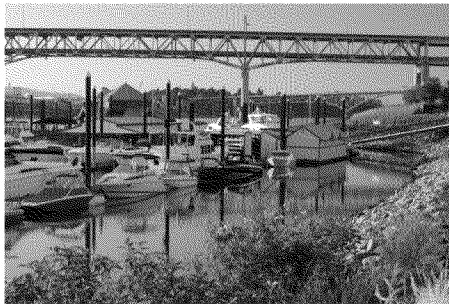
purpose of the grant is to hire a technical advisor to support the CAG. The advisor helps community members understand scientific and technical information related to the investigation and cleanup of Portland Harbor.

#### To Learn more about the Willamette Riverkeeper

- Contact Executive Director Travis Williams at 503-223-6418 or [travis@willametteriverkeeper.org](mailto:travis@willametteriverkeeper.org).
- Visit the organization's website at [www.willamette-riverkeeper.org](http://www.willamette-riverkeeper.org).



Land uses in Portland Harbor



**Personal Privacy / Ex. 6**

## What We Have Heard So Far

To make sure EPA Region 10 and ODEQ remain up to date on community concerns and priorities regarding the Portland Harbor site, we participated in and hosted a series of activities in 2012. These venues included Portland Harbor CAG meetings and the CAG's 2012 Field Day, neighborhood association meetings, public involvement sessions, and focus groups. We also did a lot of one-on-one outreach, visiting local neighborhoods and meeting with area organizations.

Here is a brief summary of the community feedback shared with EPA Region 10 and ODEQ during these activities.

### Community Requests

- Ensure that outreach efforts include underrepresented communities.
- Provide regular site status updates to area communities on upcoming site activities and make sure they are regularly involved in site discussions and meetings.
- Have EPA site staff attend community meetings and share updates.
- Host non-technical meetings where people can share their thoughts, ask questions and provide input in an informal setting.



- Help identify community demographics
- Coordinate the cleanup with efforts to prevent the recontamination of the harbor.
- Maintain the continued economic viability of the harbor and the Portland metropolitan area.
- Enable educational opportunities for students to learn about the site and its cleanup.
- Respond to community concerns about the placement of a confined disposal facility (CDF) and explore alternative treatment technologies.
- Make sure the site's responsible parties pay their fair share of the cleanup.
- Provide periodic briefings to the media and local, state and federal elected officials.
- Give semi-annual presentations on the site's status, milestones and next steps to the Swain Island Business Association.

### Community Suggestions

#### *General*

- To reach underrepresented communities, translate materials into Spanish, Vietnamese and Russian and share the information using ads in newspapers, public service announcements on the radio and television, and articles in community newsletters.
- Direct community outreach is also effective. Attending community celebrations and ethnic festivals is a good way to reach different communities and neighborhood associations in the area.
- Continue working with local non-profit community organizations to help share site information.

#### *For Outreach to Spanish-Speaking Communities*

- There is a need for more public awareness regarding the health risk posed by eating resident fish from Portland Harbor. People are catching and eating the fish.
- Information sharing needs to reach families and children. Possible options include passing out information in Spanish in schools, churches and community centers, and placing television commercials on the local Spanish channel and ads in the community outreach section of the *El Latino de Hoy* newspaper. Other options include hosting afterschool programs, providing public service announcements on Radia Latina, providing information during free-lunch-in-the-park programs, the Explorando el Colombia Slough Festival, Portland Sunday Parkways and the Laura Media Health Fair, and working with the Northwest Family Services organization to coordinate meetings and outreach.

#### *For Outreach to Vietnamese Communities*

- There is a need for more public awareness regarding the health risk posed by eating resident fish from Portland Harbor. People are catching and eating the fish.
- People are very concerned about their health and being healthy. Outreach should focus on Vietnamese neighborhoods in southeast and southwest Portland, along 82nd Avenue, Powell Boulevard, Division



Street, Foster Road and Glisan Street.

- Public notices and warning signs work well. Ads highlighting the fish advisory in the *Phuong Dong Times* newspaper would also work well.
- There is a need for translation services.

### *For Outreach to Russian and Slavic Communities*

- There is a need for more public awareness regarding the health risk posed by eating resident fish from Portland Harbor. Eastern European groups fish the harbor most heavily on weekends.
- The EPA should work with Orthodox Christian churches in the area and Russian Oregon Social Services on outreach efforts. Attending and sharing information at community festivals is also a good option.

## Community Questions

- Where and how should contaminated sediments be disposed of?
- Will businesses be able to continue to operate during and after the cleanup?
- How will people know that the fish in the harbor are safe to eat?
- Will the involvement of different government agencies and tribal governments slow down the investigation and cleanup?
- How will agencies post and advertise unsafe conditions?
- How do contaminated sediments affect water quality?
- How much contamination is there; how far does it extend?

## Community Involvement Objectives

Based on the community feedback EPA Region 10 and ODEQ received in 2012, our goals for the site's updated Community Involvement Plan are to:

- Make sure the cleanup process reflects community interests and priorities.
- Provide regular and timely information about upcoming cleanup activities and future plans.
- Continue to work with all affected communities and other interested parties, maintaining regular and open dialogue to respond to questions and concerns as they arise.
- Identify and reach out to other communities not represented on the CAG to make sure their voices are heard.
- Evaluate the effectiveness of this Community Involvement Plan and make changes as needed.

## Community Involvement Activities

EPA and ODEQ have developed public outreach activities that we plan to use to keep you informed. Audiences for these efforts will include people who may be:

- Affected by environmental impacts or cleanup work in Portland Harbor.
- Involved in site investigation activities or cleanup activities.
- Interested in cleanup work in the harbor or issues related to the Willamette River.
- Responsible for the general welfare of area communities, businesses, organizations and governments.



## Portland Harbor Superfund Site Community Involvement Plan

### **Review Portland Harbor Reports :**

EPA will make reports, documents and other relevant materials accessible to the public by posting them on the EPA's Portland Harbor website and sending email notification of their availability. EPA Region 10 will also make hard copies available in the Multnomah County Central Library and in the EPA Oregon Office. Copies of reports will also be available on cdroms upon request. Appendix E: Acronyms, and Appendix F: Glossary of Terms, are resources for community use while reading these materials.

### **Participate During Public Comment Periods :**

Comments received by the EPA during public comment periods will be shared with project managers and the project team, placed in the administrative record, and receive a written response from EPA Region 10. Comments received outside of formal public comment periods will also be shared with project managers and the project team and placed in the administrative record. They will not receive a written response.

### **Participate/ Attend CAG Meetings:**

EPA and ODEQ will continue to work closely with the Portland Harbor CAG, attending meetings, providing information and serving as resources to answer community questions. As funding is available, EPA plans to continue supporting the site's technical assistance grant to provide independent technical review and interpretation of project information for the community.

### **Invite Us to Your Community Event or Meeting:**

EPA and ODEQ are available to meet with community members, neighborhood associations and other site stakeholders to discuss the site's status and keep up-to-date on community issues and concerns. We are available to attend regularly scheduled meetings of community groups and neighborhood associations upon request.

### **Attend Public Information Sessions:**

EPA and ODEQ will continue to host periodic open houses, public information sessions and workshops to help make information widely available at significant milestones during the site's cleanup.

The

### **Briefings for Elected Officials:**

EPA and ODEQ project managers and staff will routinely brief local, state and federal legislators about progress on the Portland Harbor cleanup. These briefings will provide another way for project information to reach local constituents. In return, legislators will be able to share their constituents' concerns with the EPA and ODEQ.

### **Contact Us with Questions or Concerns::**

Alanna Conley and Marcia Danab are the project's community involvement contacts. They are available to talk with anyone who has concerns or questions about the Portland Harbor cleanup. They will share the information they gather with the project team.

### **Where/How Can Get Information About Portland Harbor**

#### **Fact Sheets:**

The EPA and ODEQ will issue periodic fact sheets about cleanup activities, significant milestones, technical information and project findings. The fact sheets will be sent to the Portland Harbor email list (see below) and posted on the EPA and ODEQ Portland Harbor Web pages. Hard copies of fact sheets will be distributed during CAG meetings and provided to community groups and individuals upon request.

## Portland Harbor Superfund Site Community Involvement Plan

### Articles and News Releases:

The EPA and ODEQ may periodically submit articles to trade publications and local newspapers. Public notices for submission of public comments on the Proposed Plan will be posted in one or more newspapers. Significant project news and milestones may be shared by EPA public affairs offices with Portland media outlets.

### Portland Harbor Email List:

Site agencies will maintain and regularly update their respective Portland Harbor email lists to make sure stakeholders and neighbors receive information updates. To join the email list, please send a request by email, phone or mail to the EPA or ODEQ contacts listed on page 2. Contact the EPA if you should need printed copies.

### Information Repositories:

Reports, technical documents and other Information requested from the EPA and ODEQ can be delivered to Multnomah County Central Library (801 SW 10th Avenue, Portland OR 97205 | (503) 988-5123) for public review.

### Websites:

The EPA and ODEQ maintain project websites where people can access site information. To access the EPA Portland Harbor website, visit [www.epa.gov/region10/portlandharbor](http://www.epa.gov/region10/portlandharbor). To access ODEQ's website, visit [www.deq.state.or.gov/nwh/ph](http://www.deq.state.or.gov/nwh/ph).

## Reaching Targeted Communities

### Outreach to Targeted Communities:

To make sure we reach historically underrepresented communities who may be interested in the site's cleanup or impacted by the site, who may not attend CAG and other site meetings, EPA and ODEQ will continue to host and/or participate in discussions to help identify community needs, concerns and priorities. In addition to measures outlined elsewhere in this document, special efforts will continue to be taken to reach the following parts of the affected community:

- *Subsistence fishers:* We will continue to work with the Oregon Health Authority and the Willamette Riverkeeper to develop and post signs near boat launches and in community parks, have interagency information booths at local events, provide multilingual information about the site and about risks from eating resident fish.
- *Non-English speaking groups:* If you need site information translated into other languages, please let us know. We are able to provide materials in Chinese, Russian, Spanish, Hmong, Vietnamese and other languages upon request.
- *Tribal populations:* We will work with tribal governments to identify specific tribal information and education needs and share project updates. We are available to attend community organizations supporting Tribal provide presentations and participate in events

### Community Involvement Plan Review:

We will ask for feedback on our community involvement efforts through public information sessions and comments received by email and phone. The EPA will update the Community Involvement Plan over time as needed.



Community Outreach and Involvement Activities for 2013 and Beyond (estimated dates)*	
<b>Ongoing:</b>	Participation in monthly CAG meetings, neighborhood association meetings and presentations to community groups upon request.
	Responding to information requests from residents.
	Attending community festivals and other outreach events.
	Meeting with community groups as requested.
	Providing updates during Oregon Environmental Justice Task Force meetings.
	Updating and involving project partners – local, state and federal agencies and tribal governments.
	Briefing local, state and federal elected officials.
<b>April 2013:</b>	Outreach and announcement on additional studies for River Mile 11 east.
	Presentation to the Portland Harbor CAG on EPA's comments on the draft feasibility study, final human health risk assessments. River Mile 11E, and fish tissue sampling.
<b>April-May 2013:</b>	Human health risk assessment and ecological risk assessment fact sheets available to the public. Fact sheets will be provided via email, EPA website, hard copies will be distributed to community groups and and mailed upon request.
	Human health and ecological risk assessments finalized and made available for public review at the Multnomah County Central Library, EPA Oregon Operations Office and on EPA website. CDROM copies available upon request
<b>May 2013</b>	Community Involvement Plan provided for public review, posted on site Web page, sent to site email list, and shared with community partners and tribal governments.
	ODEQ upland source controls update presented during CAG meeting
<b>Spring-Summer 2013</b>	Participating in community outreach events and provide educational information on risks from eating resident fish.
<b>Summer 2013</b>	Site update presentation to the Swan Island Business Association.
<b>Spring-Summer 2014:</b>	Portland Harbor public information sessions. Sessions to provide overview of site status, next steps and help prepare community for proposed plan. .

## Portland Harbor Superfund Site Community Involvement Plan

<b>Winter 2014 (one month prior to issuance of Proposed Plan):</b>	Proposed Plan fact sheets and frequently asked questions (FAQs) available to the public.
<b>Winter 2014 (one month prior to issuance of Proposed Plan):</b>	Public meetings and community presentations on the draft Proposed Plan.
<b>Winter 2014:</b>	Draft Proposed Plan provided for public review, posted on site Web page, sent to site emailing list, and shared with community partners and tribal governments.
<b>Summer – Fall 2014:</b>	Notifications of draft Proposed Plan availability published in multiple languages in local media.
<b>Summer – Fall 2014:</b>	Public information session on draft Proposed Plan.



## Portland Harbor Superfund SiteCommunity Involvement Plan

<b>Summer – Fall 2014 (30-120 days):</b>	Public comment period on the draft Proposed Plan.
<b>2014 and Beyond:</b>	Finalized Proposed Plan.
	Tribal consultation (prior to issuance of ROD)
	ROD fact sheets and FAQs available to the public.
	Public meetings and community presentations on the draft ROD.
	ROD provided for public review, posted on site Web page, sent to site email list, and shared with community partners and tribal governments.
	Notifications of draft ROD availability published in multiple languages in local media.
	Public information session on draft ROD.
	Finalized ROD.
	Remedial design and remedial action.



EPA community involvement activities for the Portland Harbor site in 2012 included site tours and information booths at community events.

## Project Roles and Responsibilities

### Site Agencies

The EPA and ODEQ signed a Memorandum of Understanding in February 2001 to work collaboratively on the cleanup of the Portland Harbor site. The EPA is responsible for cleanup of contaminated sediments in the river. ODEQ is the lead agency for cleaning up upland sites along the banks of the river. ODEQ is also responsible for coordinating the Portland Harbor work with other state and local efforts such as the Governor's Oregon Plan and the City of Portland Combined Sewer Overflow (CSO) project.

### Regulatory Overview

The EPA and ODEQ's work in Portland Harbor is governed by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended by the Superfund Amendments and Reauthorization Act (SARA) of 1986 as well as the State of Oregon's Environmental Cleanup Law (Oregon Revised Statutes 465-200 et. seq.), the Clean Water Act, the Endangered Species Act, and other applicable laws and regulations.

### Portland Harbor Natural Resource Trustee Council

EPA Region 10 and ODEQ are also part of a larger intergovernmental project team that includes natural resource trustee organizations designated by law to act on behalf of the public or tribes to protect natural resources such as salmon, migratory birds and their habitat. To coordinate their damage assessment and restoration planning actions, the Trustees for Portland Harbor natural resources formed the Portland Harbor Natural Resource Trustee Council in 2002.

The trustees involved in the Portland Harbor project include the U.S. Fish and Wildlife Service, the National Oceanic and Atmospheric Administration, the Oregon Department of Fish and Wildlife and six tribal governments. The tribal governments are the Confederated Tribes and Bands of the Yakama Nation, the Confederated Tribes of the Grand Ronde Community of Oregon, the Confederated Tribes of Siletz Indians, the Confederated Tribes of the Umatilla Indian Reservation, the Confederated Tribes of the Warm Springs Reservation of Oregon, and the Nez Perce Tribe.

The tribal governments have expressed interest in the Portland Harbor work because of:

- Treaty rights that provide access to the river's resources.
- Historical use of the area for fishing and cultural purposes.
- Importance of fish and lamprey eel for sustenance and ceremonial purposes.
- Their roles as natural resource trustees charged with protection of fish and wildlife.

The relationship and responsibilities of the intergovernmental project management team are also established in the site's February 2001 Memorandum of Understanding. The Memorandum is available at the EPA and ODEQ websites or upon request from the agencies.

This Community Involvement Plan serves as a basis for providing information to affected tribal community members. EPA and ODEQ staff will continue to work with the tribal members of the intergovernmental project team to identify the specific needs of tribal members. Both the EPA and ODEQ have obligations to consult with tribal governments on a government-to-government basis, and the EPA has a trustee responsibility to the tribes as a federal agency. Community outreach activities are separate from trustee responsibilities and consultation between governments.

### Potentially Responsible Parties

## Portland Harbor Superfund Site Community Involvement Plan

The EPA has identified about 150 parties that are potentially responsible for site cleanup costs. The Lower Willamette Group is a coalition of Portland Harbor businesses and public agencies who voluntarily stepped forward to participate in site investigations and cleanup. The Group signed an Administrative Order on Consent to conduct the site's remedial investigation, human health and risk assessment, and feasibility study under EPA oversight. Once a cleanup plan is in place, EPA Region 10 will request that the parties negotiate an agreement to fund and implement the site's cleanup. For more information, visit [lwgportlandharbor.org](http://lwgportlandharbor.org).

### Working Together for Cleanup



EPA Region 10

*Cleanup of Willamette River sediments*



Oregon DEQ

*Cleanup of upland sites*



Lower Willamette Group and  
Other Responsible Parties

*Remedial investigation and feasibility  
study; site cleanup costs*



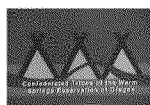
Portland Harbor CAG

*Community forum for education,  
information sharing, input into site  
decision-making*



Portland Harbor Natural  
Resource Trustee Council

*Natural resource damage assessment  
and restoration planning*



## What's Next in the Cleanup Process

The remedial investigation and feasibility study (RI/FS) for the Portland Harbor site is nearing completion. This stage of the Superfund process identifies the locations, types and amounts of contamination in the harbor. The Lower Willamette Group submitted the site's RI Report to the EPA in October 2009. The site's draft FS Report was submitted to the EPA in March 2012. The report includes ecological and human health risk assessments looking at the risks posed to people, fish, wildlife and plants by contaminated sediment at the site. The EPA is currently reviewing the draft FS Report.

Once finalized, the EPA will use the FS Report to help prepare a plan to clean up Portland Harbor. The Proposed Plan will summarize cleanup alternatives and propose a preferred course of action. The EPA will ask for public comments on the Proposed Plan. Tribal consultations and a review by ODEQ will also take place.

After carefully considering public input on the Proposed Plan, the EPA will issue a Record of Decision (ROD) for Portland Harbor. The EPA will then negotiate with the site's potentially responsible parties to design and put the selected remedy in place.

Placeholder for ODEQ next steps content.

The community involvement action plan on page 12 provides dates and timeframes for upcoming EPA site activities and milestones.

### The Feasibility Study

The Feasibility Study outlines the different methods available for sediment cleanup and describes a wide range of ways to combine those methods into cleanup alternatives.

Methods to clean up contaminated sediment include:

- Digging it up (dredging).
- Covering it with clean soil (capping).
- Treating it in place (in-situ treatment).
- Allowing cleaner upriver sediments to cover it up (natural recovery).

### Dredging

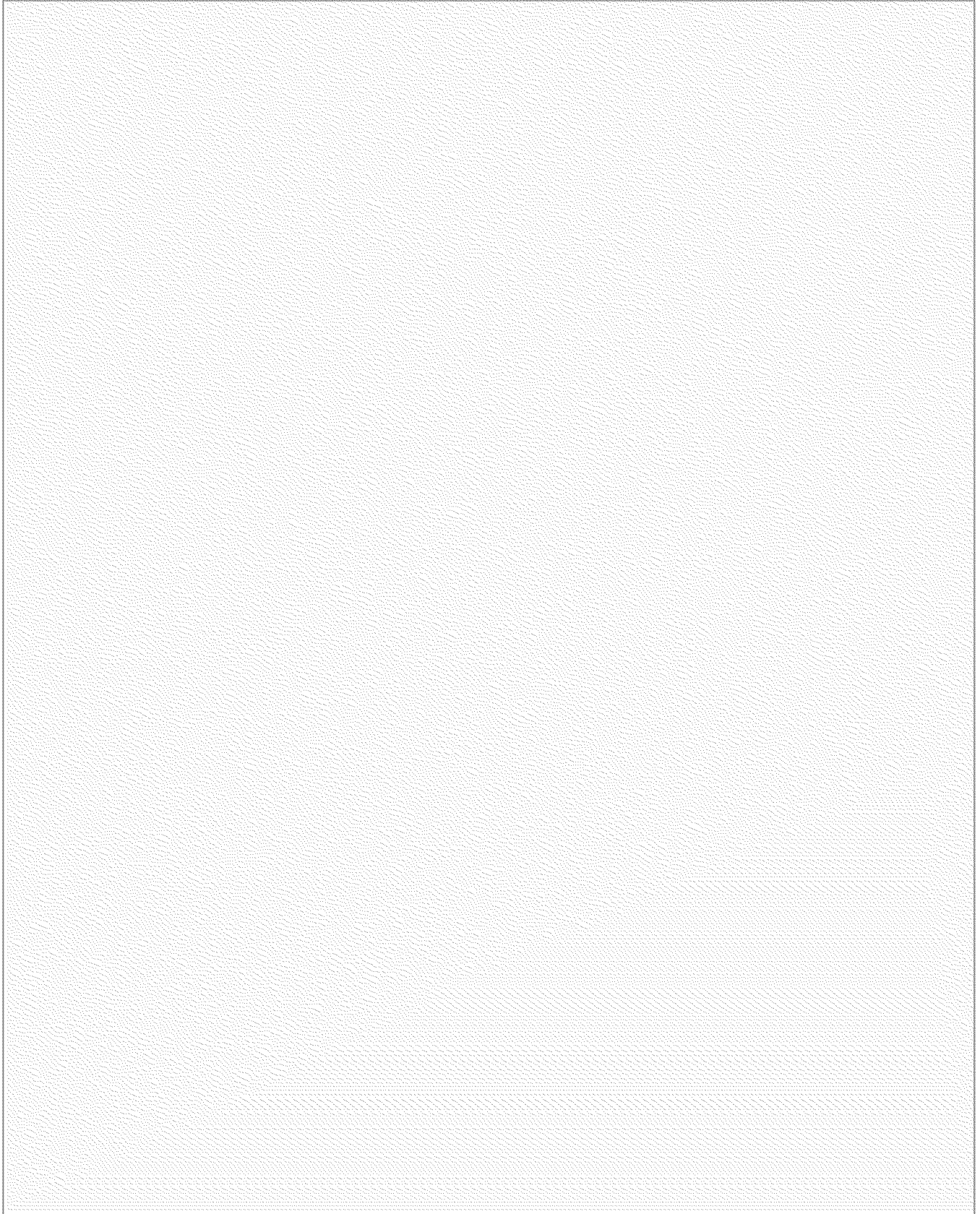


### Capping



You can review the draft FS Report at the Multnomah County Central Library or online at [www.epa.gov/region10/portlandharbor](http://www.epa.gov/region10/portlandharbor).

**Notetaking Page for Your Thoughts**  
**(issues, concerns and priorities to share with EPA Region 10 and ODEQ)**





## Appendix A: Superfund Community Involvement Activities

The activities proposed in this Community Involvement Plan for Portland Harbor include public involvement requirements established by law or regulation for all Superfund sites. The information in this appendix has been included as a helpful reference. The citation at the end of each paragraph uses the following abbreviations:

- NCP: National Contingency Plan
- CERCLA: Comprehensive Environmental Response, Compensation and Liability Act (Superfund)
- CFR: Code of Federal Regulations

The numbers and letters in parentheses indicate the chapter, section and paragraph where this information originates. People can request copies of these laws and regulations from any EPA office.

### Upon Completion of the Feasibility Study and Proposed Plan

#### Site Activity: RI/FS and Proposed Plan Notification and Analysis

*Minimum Requirements:* The lead agency must publish a notice of the availability of the RI/FS and Proposed Plan, including a brief analysis of the Proposed Plan, in a major local newspaper of general circulation. The notice also must announce a comment period.

*Reference:* SARA 117(a) and (d); NCP 40 C.F.R. 300.430(f)(3)(i)(a)

#### Site Activity: Public Comment Period on RI/FS and Proposed Plan

*Minimum Requirements:* The lead agency must provide at least 30 days for the submission of written and oral comments on the Proposed Plan and supporting information located in the information repository, including the RI/FS. The agency will extend this comment period by a minimum of 30 additional days upon timely request.

*Reference:* SARA 113(k); NCP 40 C.F.R. 300.430(f)(3)(c)

#### Site Activity: Public Meeting

*Minimum Requirements:* The lead agency must provide an opportunity for a public meeting regarding the Proposed Plan and supporting information at or near the site during the comment period.

*Reference:* SARA 113 and 117(b); NCP 40 C.F.R. 300.430(f)(3)(i)(D)

#### Site Activity: Meeting Transcript

*Minimum Requirements:* The lead agency must have a court reporter prepare a publicly available meeting transcript.

*Reference:* SARA 117(a)(2); NCP 40 C.F.R. 300.430(f)(3)(i)(E)

#### Site Activity: Revised Proposed Plan and Public Comment

*Minimum Requirements:* Upon the lead agency's determination that the public could not have reasonably anticipated such changes, the agency must issue a revised Proposed Plan that includes a discussion of the significant changes and the reasons for such changes. The Agency must seek additional public comment on the revised Proposed Plan

*Reference:* NCP 40 C.F.R. 300.430(f)(3)(ii)(B)

### After the Record of Decision (ROD) Is Signed

#### **Site Activity: ROD Availability and Notification**

*Minimum Requirements:* The lead agency must make the ROD available for public inspection and copying at or near the site prior to the commencement of any remedial action. In addition, the lead agency must publish a notice of the ROD's availability in a major local newspaper of general circulation. The notice must state the basis and purpose of the selected action.

*Reference:* NCP 40 C.F.R. 300.430(f)(6)

#### **Site Activity: Revision of the Community Involvement Plan**

*Minimum Requirements:* Prior to the remedial design, the lead agency should revise the CIP, if necessary, to reflect community concern, as discovered during interviews and other activities, that pertain to the remedial design and construction phase.

*Reference:* NCP 40 C.F.R. 300.435(c)(1)

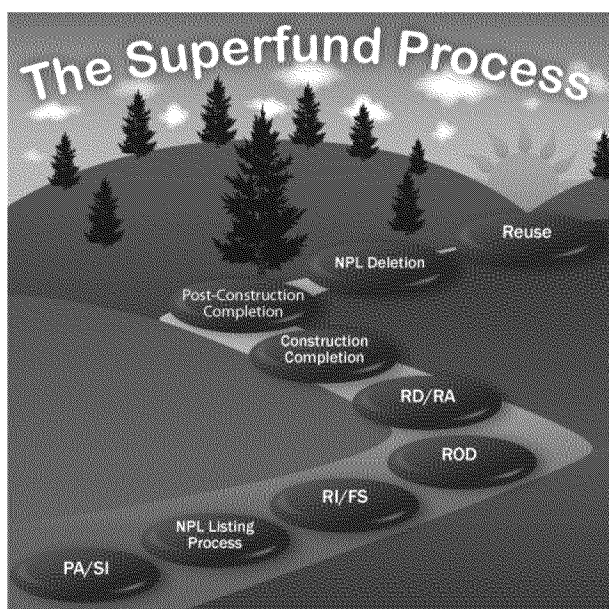
### Remedial Design

#### **Site Activity: Fact Sheet and Public Briefing**

*Minimum Requirements:* Upon completion of the final engineering design, the lead agency must issue a fact sheet and provide a public briefing, as appropriate, prior to beginning remedial action.

*Reference:* NCP 40 C.F.R. 300.435(c)(3)

## Appendix B: The Superfund Process



Source:

[www.epa.gov/superfund/community/process.htm](http://www.epa.gov/superfund/community/process.htm)

Event	Complete at Portland Harbor?	Description
Preliminary Assessment / Site Investigation (PA/SI)	✓	Initial investigations of site conditions.
NPL Listing	✓	Placement of site on the EPA's list of the most serious hazardous waste sites identified for long-term cleanup under Superfund.
Remedial Investigation / Feasibility Study (RI/FS)	✓ <b>Reports submitted but not yet finalized</b>	Studies to determine the nature and extent of contamination.
Proposed Plan	<b>2014</b>	Document summarizing proposed site remedy. EPA solicits public comments on it before ROD completion.
Record of Decision (ROD)		Decision document selecting site remedy.
Remedial Design / Remedial Action (RD/RA)		Preparation and implementation of plans and specifications for site remedies.
Construction Completion		Completion of physical cleanup construction (cleanup may remain ongoing).
Post-Construction Completion		Activities ensuring Superfund response actions provide for long-term protection of human health and the environment.
NPL Deletion		Removal of site from NPL once all response actions are complete and all cleanup goals achieved.

## Portland Harbor Superfund SiteCommunity Involvement Plan

Reuse		Return of site properties to safe and productive use following cleanup.
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## Appendix C: Area Context and History

The city of Portland is located in Multnomah County, Oregon. About 15 percent of the state's population – 584,000 people – lives in Portland. The Portland metropolitan area has a population of about 2.3 million.

Historically, the area's economy focused on the harvest of fish, timber, minerals and agricultural products. The principal industries of the Portland metropolitan area are now manufacturing, tourism, transportation, and wholesale and retail trade.

Portland Harbor is one of the busiest seaports on the Pacific Coast. Since the mid-1800s, when the first wharves began supporting international and intercoastal steamship service, the shoreline of the river near Portland has been altered for urban development and a growing shipping industry. The first dredging of the river took place in 1968. Since that time, the Willamette River has been dredged regularly for navigation and maintenance.

### The Willamette River

The Willamette River runs through the middle of Portland, flowing north through the city to where it joins the Columbia River. The shoreline has steep banks, many covered with riprap or constructed bulkheads. Many piers and wharves extend out over the water. To accommodate shipping, the river has been extensively dredged. Channel depths currently range from 10 to 140 feet, with an average depth of 45 feet. As the river flows through Portland, it is deep and slow moving, and the water level rises and falls from tidal influence.

The Port of Portland is a hub for goods importing and exporting in the region. Past and present industrial operations in Portland Harbor include:

- Marine construction
- Bulk petroleum product storage and handling
- Construction material manufacturing
- Oil fire-fighting training activities
- Oil gasification plant operations
- Pesticide and herbicide manufacturing
- Wood treating operations
- Agricultural chemical production
- Battery processing
- Liquid natural gas plant operations
- Hazardous waste storage
- Chlorine production
- Ship loading and unloading
- Ship maintenance, repair and refueling
- Rail car manufacturing
- Metal scrapping and recycling



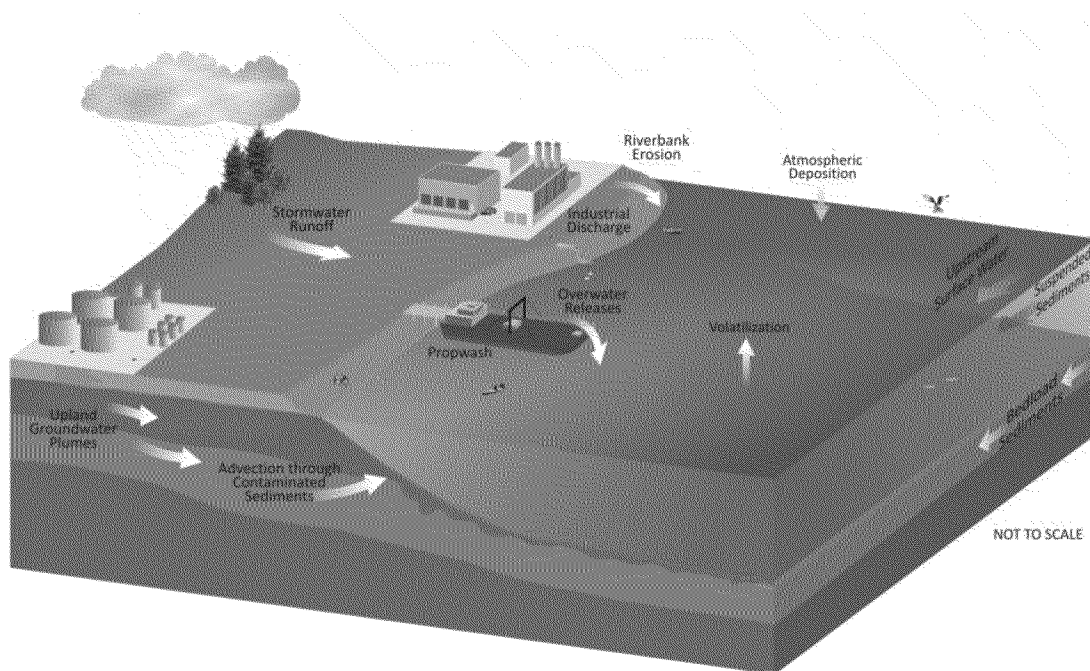
In addition to the major industrial activities along the river and in Portland Harbor, other equally important uses benefit the region. Recreational users boat and swim in the area. Recreational and subsistence fishing takes place in the harbor and up and downstream. Tribal fishing for both subsistence and ceremonial purposes continues to be a key activity. Recent studies identified many species of fish and wildlife species using Portland Harbor and the Willamette River as a migratory pathway, including threatened and endangered runs of salmon. Fish-eating birds, migratory waterfowl and raptors seasonally visit the lower Willamette River and Spring Chinook support sport and recreational fishing.





**Aerial view of Portland Harbor in 1921**

The Willamette River was used historically for transportation, water supply and waste disposal. Disposal of raw sewage and waste degraded water quality. By the 1920s, water pollution made the water unsafe for human use and toxic for wildlife. In the 1950s, the City of Portland put a sewage management plan in place to minimize the discharge of raw sewage into the river. Other cleanup activities in Portland Harbor and surrounding portions of the Willamette River have been ongoing since the early 1970s. There were controls placed on industrial discharges and municipal waste disposal facilities built throughout the Willamette Basin. Today, while historical operations and stormwater drains along the river continue to release pollutants, there are no known direct discharges from current land uses.



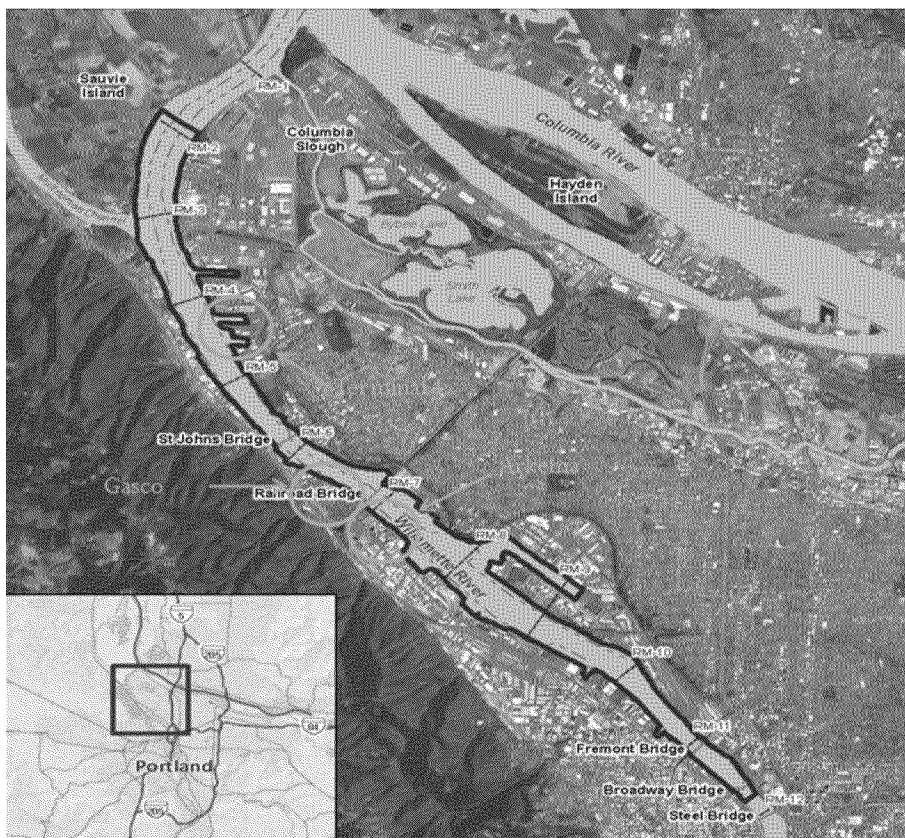
## Appendix D: Cleanup Work to Date

Cleanup of several areas is already underway. Some of these cleanup activities are complete.

### Early Action Cleanup Areas

Early action cleanup areas are parts of the Portland Harbor Superfund site that may become a threat to people or the environment before long-term cleanup is completed.

- **Arkema** – Former pesticide manufacturing facility contaminated with high levels of DDT and other chemicals. An early action is underway to address this "hot spot" in Portland Harbor.
- **Gasco-Siltronic** – Former manufactured gas plant contaminated with tar deposits from past manufacturing. Removal of tar deposits in the river (brown material in the picture to the right) finished in fall 2005.
- **Terminal 4** – Former industrial site contaminated with pesticides, PCBs, metals and PAHs. These contaminants are the focus of the early action cleanup.
- **Triangle Park** – A 35-acre former industrial site with soil and groundwater contamination. The University of Portland signed an agreement with the EPA in 2008 to clean up the area as part of its plans for new athletic facilities and trails.
- **U.S. Moorings** – A former industrial site contaminated with metals, solvents, and petroleum byproducts from boat maintenance activities. The feasibility study for the site's cleanup was complete in 2012.



Early action cleanup area location map (source: EPA Superfund Study)

## Other Sites

Beginning in the late 1980s, ODEQ's cleanup program began working with parties associated with known releases to Portland Harbor, providing oversight of investigation and cleanup activities. At the BP (ARCO) site, for example, the agency worked with responsible parties to clean up petroleum contamination from a storage and transport facility. The primary threat from the site was contamination of the Willamette River via ground water migration. Cleanup started in May 2007 and finished in November 2008.

The EPA listed two other sites – the McCormick and Baxter and Gould sites – on the Superfund program's National Priorities List. The EPA and ODEQ worked cooperatively on site investigations and cleanup.

- **McCormick and Baxter Superfund site** – Former wood treating facility located on the northeast shore of the Willamette River in north Portland. Over the last 15 years, the EPA and ODEQ and agency partners have cleaned up the site and are supporting its return to productive use.
- **Gould Superfund site** – Former lead-acid battery recycling, lead smelting and refining and lead oxide production facility near the Willamette River. Cleanup of contaminated sediment and waste material finished in 2002.

In cases where responsible parties were no longer viable, DEQ has used an Orphan Site Account to fund the necessary response measures as authorized under the Oregon Environmental Cleanup Law. In total, over 40 facilities in Portland Harbor have initiated cooperative relationships with ODEQ under the Voluntary Cleanup Program. ODEQ's website ([www.deq.state.or.us/lq/cu/nwr/portlandharbor](http://www.deq.state.or.us/lq/cu/nwr/portlandharbor)) provides more information about these sites.

## Portland Harbor: Fish Consumption Advisory

Although we work and recreate along Portland Harbor, the primary way people are exposed to contamination from the site is by eating fish such as bass, catfish and carp. These fish, called resident fish, carry levels of chemical contaminants that may cause cancer or developmental problems. PCBs are the primary contaminant associated with most of the risk from eating resident fish. Young children, nursing infants and babies in the womb are the most sensitive to the chemicals: mothers and children should avoid eating Portland Harbor resident fish. For fish advisory information, visit [www.healthoregon.org/fishadv](http://www.healthoregon.org/fishadv) or call (877) 290-6767.

# FISH ADVISORY

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Fish from these waters may be harmful to eat, especially for children, pregnant or nursing women, and women of childbearing age.





**SALMON**



**STEELHEAD**





**BASS**



**CATFISH**



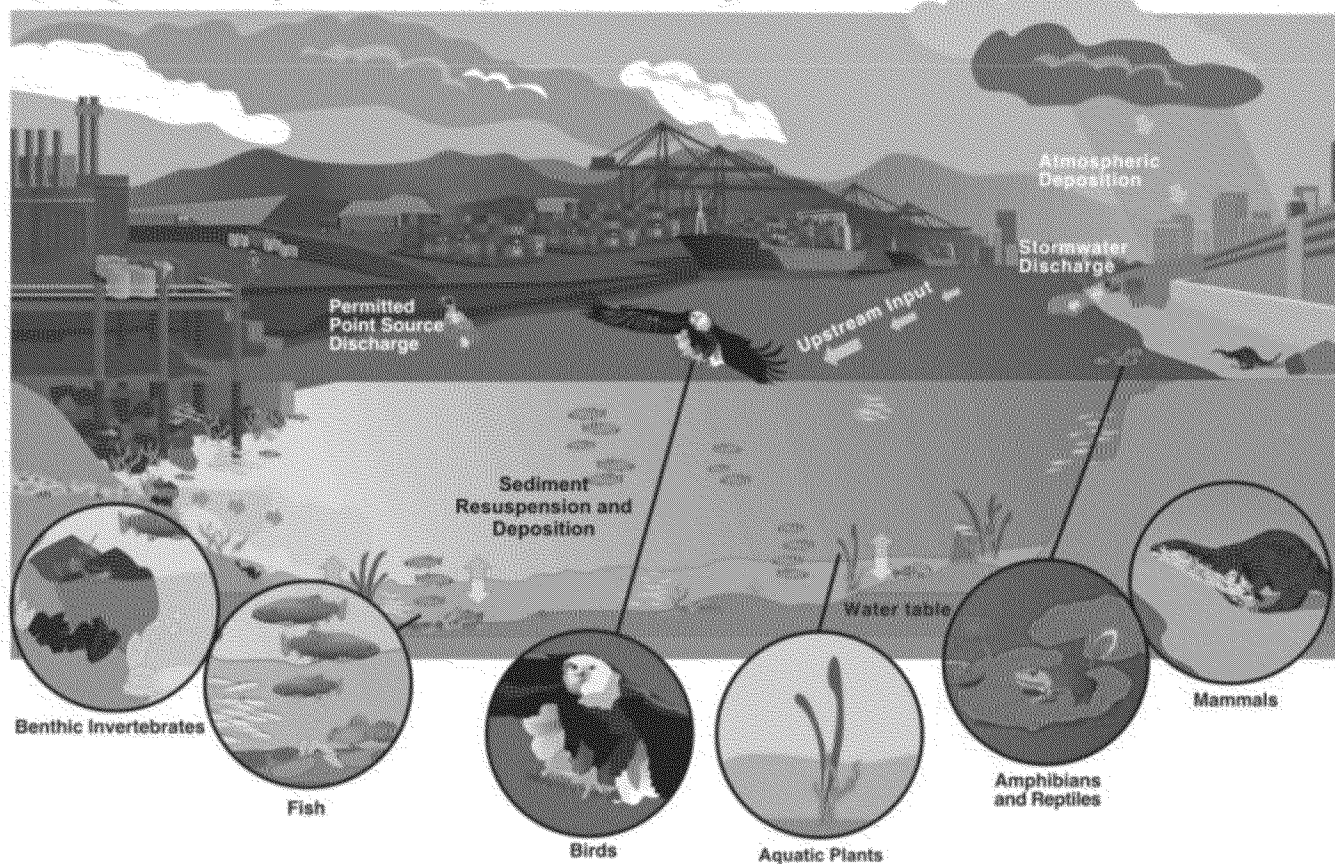
**CARP**



More information call 1-877-290-6767  
[www.healthoregon.org/fishadv](http://www.healthoregon.org/fishadv)



## Portland Harbor Superfund Site Illustration of Ecological Receptors and Exposure Pathways





## Appendix E: Acronyms

<b>AET</b>	Apparent Effects Thresholds	<b>ERED</b>	Environmental Residue-Effects Database
<b>AML</b>	Arc Macro Language	<b>ESA</b>	Endangered Species Act
<b>ANOVA</b>	Analysis of Variance	<b>ESU</b>	Evolutionary Significant Unit
<b>ARAR</b>	Applicable or Relevant and Appropriate Requirement	<b>FDA</b>	U.S. Food and Drug Administration
<b>ARL</b>	Acceptable Risk Level	<b>GIS</b>	Geographic Information System
<b>AST</b>	Aboveground Storage Tank	<b>HEAST</b>	Health Effects Assessment Summary Table
<b>B-COC</b>	Bioaccumulative Chemical of Concern	<b>HI</b>	Hazard Index
<b>BMP</b>	Best Management Practice	<b>HPAH</b>	High Molecular Weight Polycyclic Aromatic Hydrocarbon
<b>BRI</b>	Benthic Response Index	<b>HW</b>	Hazardous Waste
<b>BSAF</b>	Biota-Sediment Accumulation Function	<b>IMMP</b>	Inspection, Maintenance and Monitoring Plan
<b>BT</b>	Bioaccumulation Trigger	<b>ITI</b>	Infaunal Trophic Index
<b>CAS</b>	Chemical Abstract Service	<b>IRIS</b>	Integrated Risk Information System
<b>CBR</b>	Critical Body Residue	<b>IT IS</b>	Integrated Taxonomic Information System
<b>CERCLA</b>	Comprehensive Environmental Response, Compensation, and Liability Act	<b>ITM</b>	Inland Testing Manual
<b>CERCLIS</b>	Comprehensive Environmental Response, Compensation, and Liability Information System	<b>LDR</b>	Land Disposal Restriction
<b>CFR</b>	Code of Federal Regulations	<b>LNAPL</b>	Light Non-Aqueous Phase Liquid
<b>COC</b>	Contaminant of Concern	<b>LOAEL</b>	Lowest Observed Adverse Effect Level
<b>COE</b>	Corps of Engineers	<b>LPAH</b>	Low Molecular Weight Polycyclic Aromatic Hydrocarbon
<b>COI</b>	Contaminant of Interest	<b>LSD</b>	Least Significant Difference
<b>COPC</b>	Contaminant of Potential Concern	<b>LUST</b>	Leaking Underground Storage Tank
<b>CPEC</b>	Contaminant of Potential Ecological Concern	<b>MCLG</b>	Maximum Contaminant Level Goal
<b>CPF</b>	Cancer Potency Factor	<b>MCL</b>	Maximum Contaminant Level
<b>CSF</b>	Cancer Slope Factor	<b>NAPL</b>	Non-Aqueous Phase Liquid
<b>CSO</b>	Combined Sewer Outflow	<b>NCP</b>	National Contingency Plan
<b>CWA</b>	Clean Water Act	<b>NFA</b>	No Further Action
<b>DDD</b>	Metabolite of DDT	<b>NMFS</b>	National Marine Fisheries Service
<b>DDE</b>	Metabolite of DDT	<b>NOAA</b>	National Oceanic and Atmospheric Administration
<b>DDT</b>	Dichlorodiphenyltrichloroethane	<b>NOAEL</b>	No Observed Adverse Effect Level
<b>DMEF</b>	Dredged Material Evaluation Framework	<b>NODC</b>	National Oceanographic Data Center
<b>DNA</b>	Deoxyribonucleic Acid	<b>NPDES</b>	Natural Pollution Discharge Elimination System
<b>DNAPL</b>	Dense Non-Aqueous Phase Liquid	<b>NPL</b>	National Priorities List
<b>DO</b>	Dissolved Oxygen	<b>NRDA</b>	Natural Resource Damage Assessment
<b>DQO</b>	Data Quality Objective	<b>NWEA</b>	Northwest Environmental Advocates
<b>DSL</b>	Oregon Division of State Lands	<b>OAR</b>	Oregon Administrative Rules
<b>DWR</b>	Department of Water Resources	<b>OCF</b>	On-Site Containment Facility
<b>ECSI</b>	Environmental Cleanup Site Information Database	<b>ODEQ</b>	Oregon Department of Environmental Quality
<b>EIS</b>	Environmental Impact Statement	<b>ODFW</b>	Oregon Department of Fish and Wildlife
<b>EPA</b>	U.S. Environmental Protection Agency		

## Portland Harbor Superfund Site Community Involvement Plan

<b>ODOT</b>	Oregon Department of Transportation	<b>TPH</b>	Total Petroleum Hydrocarbons
<b>ODWR</b>	Oregon Department of Water Resources	<b>TPL</b>	The Trust for Public Lands
<b>ORS</b>	Oregon Revised Statutes	<b>TRV</b>	Toxicity Reference Value
<b>OSA</b>	Orphan Site Account	<b>TSC</b>	Tissue Screening Concentrations
<b>PA</b>	Preliminary Assessment	<b>TSS</b>	Total Suspended Solids
<b>PAH</b>	Polycyclic Aromatic Hydrocarbon	<b>TTL</b>	Target Tissue Level
<b>PCB</b>	Polychlorinated Biphenyl	<b>USACE</b>	U.S. Army Corps of Engineers
<b>PCDD</b>	Polychlorinated Dibenzodioxin	<b>USFWS</b>	U.S. Fish and Wildlife Service
<b>PCDF</b>	Polychlorinated Dibenzofuran	<b>USGS</b>	U.S. Geological Survey
<b>PCP</b>	Pentachlorophenol	<b>UST</b>	Underground Storage Tank
<b>PDC</b>	Portland Development Commission	<b>VCP</b>	Voluntary Cleanup Program
<b>PHSMP</b>	Portland Harbor Sediment Management Plan	<b>VOC</b>	Volatile Organic Compound
<b>PPA</b>	Prospective Purchaser Agreement	<b>WRDA</b>	Water Resources Development Act
<b>PRP</b>	Potentially Responsible Party		
<b>PSEP</b>	Puget Sound Estuarine Protocols		
<b>PSY</b>	Portland Ship Repair Yard		
<b>QA/QC</b>	Quality Assurance/Quality Control		
<b>OSA</b>	Orphan Site Account		
<b>RAGS</b>	Risk Assessment Guidance for Superfund		
<b>RAO</b>	Remedial Action Objective		
<b>RCRA</b>	Resource Conservation and Recovery Act		
<b>RD/RA</b>	Remedial Design/Remedial Action		
<b>RDT</b>	Regional Decision Team		
<b>RfD</b>	Reference Dose		
<b>RI/FS</b>	Remedial Investigation/Feasibility Study		
<b>RM</b>	River Mile		
<b>RME</b>	Reasonable Maximum Exposure		
<b>ROD</b>	Record of Decision		
<b>RP</b>	Responsible Party		
<b>SAM</b>	Sediment Assessment Methodology		
<b>SAP</b>	Sampling and Analysis Plans		
<b>SIMI</b>	Similarity Index		
<b>SMP</b>	Sediment Management Plan		
<b>SPI</b>	Sediment Profile Imaging		
<b>SQG</b>	Sediment Quality Guideline		
<b>TAG</b>	Technical Assistance Grant		
<b>TBT</b>	Tributyltin		
<b>TCA</b>	Trichloroethane		
<b>TEC</b>	Trichloroethylene		
<b>TCLP</b>	Toxicity Characteristic Leaching Procedure		
<b>TEF</b>	Technical Evaluation Framework		
<b>TIE</b>	Toxicity Identification Evaluation		
<b>TMDL</b>	Total Maximum Daily Load		
<b>TOC</b>	Total Organic Compounds		



## Appendix F: Glossary of Terms

**Applicable or Relevant and Appropriate Requirements (ARARs):** The federal Superfund law (CERCLA) specifies that remedial actions must comply with requirements or standards under federal or more stringent state environmental laws that are applicable or relevant and appropriate to the hazardous substances or particular circumstances of a site. Applicable requirements are those protection requirements that specifically address a hazardous substance at a CERCLA site. Relevant and appropriate requirements are those protection requirements that, while not applicable to a hazardous substance, address problems sufficiently similar to those encountered at a CERCLA site to make them useful. (52 FR 32496, August 27, 1987)

**Assessment Endpoint:** An explicit expression of a specific ecological receptor and an associated function or quality to be maintained or protected. Assessment endpoints represent ecological receptors directly or as their surrogates for the purposes of an ecological risk assessment. (OAR 340-122-115(7))

**Background Level:** Concentration of hazardous substances, if any, existing in the environment near a facility before any past or present releases. (OAR 340-122-115(8))

**Benthic Infaunal Communities:** A group of plants, animals and other organisms that live in or on the sediment and interact with one another, forming a distinct living system with its own composition, structure, environmental relationships, development and function.

**Best Management Practices (BMPs):** Methods determined to be the most effective, practical means of preventing or reducing pollution from nonpoint sources.

**Bioaccumulation:** The ratio of the concentration of a chemical in an organism to the concentration of the chemical in an ambient medium (usually water).

**Bioconcentration:** The ratio of the concentration of a chemical in an organism to the concentration of the chemical in the organism's food or water.

**Biota-Sediment Accumulation Function (BSAF):** The relationship between tissue concentrations and sediment concentrations derived using tissue and sediment chemistry data.

**Bioassays:** Biological tests used to determine the toxicity and/or bioaccumulation potential of a hazardous substance.

**Brownfields:** Abandoned, idled or underused industrial and commercial facilities where expansion or redevelopment is complicated by real or perceived environmental contamination.

**Carcinogens:** Any substance or agent that produces or tends to produce cancer in humans. (OAR 340-122-115(10))

**Chemical of Interest:** A hazardous substance identified as having the potential to pose a risk to human health or the environment.

**Cleanup:** Actions taken to deal with a release or threatened release of hazardous substances that could affect public health or the environment. Agencies often use the term broadly to describe various response actions or phases of remedial activities, such as an RI/FS. "Cleanup" is sometimes used interchangeably with the terms "remedial action," "remediation," "removal action," "response action" or "corrective action."

**Cleanup Level:** Residual concentration of a hazardous substance determined to be protective of public health, safety and welfare, and the environment under specified exposure conditions. (OAR 340-122-115(11))

**Community Advisory Group (CAG):** A committee, task force or board made up of stakeholders affected by a Superfund or other hazardous waste site. A CAG provides a way for representatives of

diverse community interests to present and discuss their needs and concerns related to the site and the site cleanup process. CAGs are a community initiative and responsibility. They function independently of the EPA.

**Community Involvement Plan (CIP):** A formal plan of communication and public participation activities developed by the EPA to ensure opportunities for community members to learn more about Superfund site activities and provide input to inform site decision-making. The plan is the result of information collected through community meetings and interviews and a review of site-related documents.

**Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA):** The federal act (Public Law 96-510; December 11, 1980) that provides for liability, compensation, cleanup and emergency response for hazardous substances released into the environment and the cleanup of inactive waste disposal sites.

**Conceptual Model:** A written description and illustration of predicted relationships between receptors (both human and ecological) and the hazardous substances they may be exposed to.

**Consent Order:** Legal vehicle to make sure cleanup moves forward at a contaminated site. It typically contains stipulated penalties for non-performance by the liable entity and cannot be terminated unilaterally.

**Contaminant of Concern:** A hazardous substance present in such concentrations that it poses a threat or a potentially unacceptable risk to public health or the environment. (OAR 340-122-115(15))

**Data Quality Objectives (DQOs):** Qualitative and quantitative statements of the overall level of uncertainty that a decision-maker will accept in results or decisions based on environmental data. These provide the statistical framework for planning and managing environmental data operations consistent with user's needs.

**Ecological Risk Assessment:** The process for evaluating how likely it is that the environment may be impacted because of exposure to one or more environmental stressors such as contaminants and hazardous wastes.

**Endangered Species Act (ESA):** Federal statute enacted in 1973 to conserve species and ecosystems. Species facing possible extinction are listed as "threatened" or "endangered" or as "candidate" species for such listings. Following such a listing, recovery and conservation plans are put in place to protect the species and its habitat.

**Environment:** The sum of all external conditions affecting the life, development and survival of an organism.

**Environmental Cleanup Law:** Oregon's revised cleanup law, enacted in 1995, which expanded ODEQ's authority related to the identification, investigation and cleanup of hazardous substances.

**Environmental Protection Agency (EPA):** Federal agency whose mission is to protect human health and safeguard the environment.

**Facility:** Any site or area where a hazardous substance is located and where a release has occurred or the potential for a release exists. (OAR 340-122-115(26))

**Feasibility Study:** An assessment of cleanup alternatives. A feasibility study, or FS, takes place if the risk assessment performed during a remedial investigation establishes the presence of unacceptable risks. During an FS, EPA screens and evaluates alternatives to clean up a site based on nine evaluative criteria, including effectiveness, cost and community acceptance.

**Harbor-Wide Assessment:** Investigations conducted in the lower Willamette River (River Miles 0.0 to 26.5), inclusive of Portland Harbor (River Miles 3.5 to 9.5), and possibly extending into the Columbia River near its confluence with the Willamette River.

**Hazard Index:** If a person is exposed to more than

one chemical, a screening-level estimate of the total non-cancer risk is derived simply by summing the HQ values for that individual. This total is referred to as the Hazard Index, or HI.

**Hazard Ranking System:** The principal mechanism the EPA uses to place uncontrolled waste sites on the National Priorities List. The numerically based screening system uses information from initial, limited investigations to assess the relative potential of sites to pose a threat to human health or the environment.

**Hazardous Waste:** Solid wastes that possess at least one of four characteristics (ignitability, corrosivity, reactivity or toxicity), appear on special EPA lists, or are defined as hazardous by Oregon rules and statutes.

**Hot Spots:** For ground water or surface water, hazardous substances having a significant adverse effect on beneficial uses of water or waters to which the hazardous substance would be reasonably likely to migrate and for which treatment is reasonably likely to restore or protect such beneficial uses within a reasonable time. For media other than water (including sediments), defined by the presence of high concentrations of hazardous substances that are likely to migrate and create a hot spot of contamination elsewhere, or by the presence of hazardous substances that are not reliably confinable. (OAR 340-122-115(31))

**Human Health Risk Assessment:** The process to estimate the nature and probability of adverse health effects in humans who may be exposed to chemicals in contaminated environmental media, now or in the future.

**Institutional Control:** Legal or administrative tool or action taken to reduce the potential for exposure to hazardous substances, which may include, but are not limited to, use restrictions, environmental monitoring requirements, and site access and security measures. (OAR 340-122-115(32))

**Joint and Several Liability:** Under CERCLA, this legal concept relates to the liability for Superfund site

cleanup and other costs on the part of more than one potentially responsible party (i.e., if there were several owners or users of a site that became contaminated over the years, they could all be considered potentially liable for cleaning up the site).

**National Contingency Plan (NCP):** The National Oil and Hazardous Substances Pollution Contingency Plan, more commonly known as the National Contingency Plan, or NCP, is the federal government's blueprint for responding to both oil spills and hazardous substance releases.

**National Priorities List (NPL):** The EPA's list of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term cleanup under Superfund. The list is based primarily on the score a site receives from the Hazard Ranking System. The EPA is required to update the NPL at least once a year.

**No Further Action (NFA):** A determination by ODEQ following a preliminary assessment, risk assessment or completion of remedial action that no unacceptable risks to human health or to the environment remain.

**Noncarcinogen:** Hazardous substance with adverse health effects other than cancer on humans. (OAR 340-122-115(36))

**ODEQ:** State agency whose job is to protect the quality of Oregon's Environment. ODEQ is responsible for protecting and enhancing Oregon's water and air quality, for cleaning up spills and releases of hazardous materials, and for managing the proper disposal of hazardous and solid wastes.

**Orphan Site Account (OSA):** Account used to fund investigation and remedial actions where liable parties are unknown, unwilling or unable to participate. ODEQ uses litigation to recover OSA funds from recalcitrant responsible parties.

**Potentially Responsible Party:** An individual, company or other entity (such as owners, operators, transporters or generators of hazardous

waste) potentially responsible for, or contributing to, contamination at a Superfund site. Whenever possible, the EPA requires a PRP, through administrative and legal actions, to clean up hazardous waste sites it has contaminated.

**Preliminary Assessment (PA):** An assessment of information about a site and its surrounding area. A preliminary assessment determines whether a site poses little or no threat to human health and the environment or if it does pose a threat, whether the threat requires further investigation.

**Proposed Plan:** A plan for a site's cleanup that is available to the public for review and comment.

**Public Availability Session:** Informal public sessions that often use poster displays and fact sheets and that include EPA staff and contractors who are available to discuss issues and answer questions. Public availability sessions offer the public the opportunity to learn about project-related issues and to interact with EPA staff on a one-to-one basis.

**Public Comment Period:** A formal opportunity for community members to review and contribute written comments on various EPA documents or actions.

**Public Meeting:** Formal public sessions characterized by a presentation to the public followed by a question-and-answer session. Formal public meetings may involve the use of a court reporter and the issuance of transcripts. Formal public meetings are required only for the Proposed Plan and ROD amendments at a site.

**Record of Decision (ROD):** The public document issued by the EPA that explains the cleanup alternatives selected to clean up a Superfund site.

**Release:** Any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing into the environment, including the abandonment or discarding of barrels, containers and other closed receptacles containing any hazardous substance, or any threat thereof, but excluding exposures within a workplace, emissions from the engine exhaust,

nuclear material and the normal application of fertilizer.

**Remedial Alternative:** An action considered in the feasibility study intended to reduce or eliminate unacceptable risks to human health and the environment at a site. The feasibility study considers a range of remedial alternatives. A site's Record of Decision documents the selection of a specific remedial alternative over other alternatives.

**Remedial Action:** The selected remedial alternative documented in a site's Record of Decision.

**Remedial Investigation (RI):** The first of the two-part site study known as a remedial investigation/feasibility study. The remedial investigation involves collecting and analyzing information about a site to determine the nature and extent of contamination that may be present. The risk assessment, conducted with the remedial investigation, determines how conditions at a site may affect human health or the environment.

**Remediation:** The removal of pollution or contaminants from land, water and air to protect human health and the environment. Also see *cleanup*.

**Removal Action:** Action necessary to prevent, minimize or mitigate damage to public health, safety and welfare, and the environment (OAR 340-122-070). Generally taken in response to an imminent threat, it may take place at any point in the site response process, and may include source control measures, removal of highly contaminated material, and/or posting warning signs or constructing fences around a contaminated site.

**Risk:** Probability that a hazardous substance, when released into the environment, will cause adverse effects in exposed humans or ecological receptors.

**Risk Assessment:** The process of evaluating whether a hazardous substance poses a potential threat to human health and the environment, either now or in the future.

**Sediment:** Soils, sand, organic matter or minerals that accumulate on the bottom of a water body.

**Sediment Quality Guidelines (SQGs):** Numeric sediment concentrations above which further biological testing and/or a feasibility study may be warranted. Below these concentrations, suspected sediment contaminants are unlikely to pose an unacceptable risk.

**Site Assessment:** Process to evaluate potential or confirmed releases of hazardous substances that may pose a threat to human health or the environment. Criteria established under the Hazard Ranking System guide the process, which EPA, state, tribal or other federal agency environmental programs carry out.

**Site Discovery:** Process of identifying and documenting a release of hazardous substance to the environment.

**Site-Specific Assessment:** A remedial investigation conducted at a site or facility under the jurisdiction of Oregon's environmental cleanup statutes and rules.

**Subsistence Fishing:** People who obtain a significant portion of their dietary protein from eating self-caught fish of various species.

**Superfund:** The program operated under the legislative authority of CERCLA that funds and carries out EPA solid waste emergency and long-

term removal and remedial activities. These activities include establishing the National Priorities List, investigating sites for inclusion on the list, determining their priority, and conducting and/or supervising cleanup and other remedial actions. Superfund is the common name for CERCLA. People often use the term as an adjective for hazardous waste sites and the investigation and cleanup process directed by the EPA.

**Tissue Screening Concentrations (TSCs):** Contaminant concentration in fish tissue below which adverse effects are not expected for 95 percent of the fish species.

**Target Tissue Levels (TTLs):** A tissue concentration in food items (e.g., fish or shellfish) that does not pose an unacceptable risk to birds, mammals, or humans that consume these food items.

**Portland Harbor:** The six-mile (River Mile 3.5 to 9.5) industrialized part of the Willamette River between Swan and Sauvie Islands.

**Voluntary Cleanup Agreement:** Legal agreement to ensure cleanup moves forward at a contaminated site; entered into voluntarily by site owners, enforceable by administrative penalties or court action.

**Willamette River:** The 187-mile long waterway in northwest Oregon that flows northward between the coast and the Cascade Mountains.

# Appendix G: Additional Information Resources

## Agency Websites

EPA Region 10: [www.epa.gov/region10/portlandharbor](http://www.epa.gov/region10/portlandharbor)

ODEQ: [www.deq.state.or.us/lq/cu/nwr/portlandharbor](http://www.deq.state.or.us/lq/cu/nwr/portlandharbor)

## Portland Harbor Fact Sheets (EPA Web page or upon request)

Proposed Confined Disposal Facility Questions and Answers – January 2013

Feasibility Study and Sitewide Status Update – April 2012

Human Health Risk Assessment Overview – February 2009

## Reports and Other Materials of Interest (EPA Web page or upon request)

Draft Feasibility Study

Draft Human Health Risk Assessment

Draft Ecological Risk Assessment

Early Action Cleanup Area updates

## Other Community Resources

Portland Harbor Community Advisory Group: [www.portlandharborcag.info](http://www.portlandharborcag.info)

Willamette Riverkeeper (technical assistance grantee):

[www.willamette-riverkeeper.org/WRK/index.html](http://www.willamette-riverkeeper.org/WRK/index.html)

Natural Resource Trustee Council: [www.fws.gov/oregonfwo/Contaminants/PortlandHarbor](http://www.fws.gov/oregonfwo/Contaminants/PortlandHarbor)

Lower Willamette Group (LWG): [lwgportlandharbor.org](http://lwgportlandharbor.org)

## EPA and ODEQ Contacts

### General Questions

- Alanna Conley, EPA Community Involvement Contact – (503) 326-6831 | [conley.alanna@epa.gov](mailto:conley.alanna@epa.gov)
- Marcia Danab, ODEQ Community Involvement Contact – (503) 229-6488 | [danab.marcia@deq.state.or.us](mailto:danab.marcia@deq.state.or.us)

### Technical Questions

- Chip Humphrey, EPA Project Manager – (503) 326-2678 | [humphrey.chip@epa.gov](mailto:humphrey.chip@epa.gov)
- Jim Anderson, ODEQ Project Manager – (503) 229-6825 | [anderson.jim@deq.state.or.us](mailto:anderson.jim@deq.state.or.us)

**En Español:** Si desea hablar con alguien que habla español, llame a Michael Ortiz ([ortiz.michael@epa.gov](mailto:ortiz.michael@epa.gov)) | (206) 553-6234.

## Request copies of EPA records using FOIAonline:

[yosemite.epa.gov/r10/extaff.nsf/FOIA+pages/freedom+of+information+act](http://yosemite.epa.gov/r10/extaff.nsf/FOIA+pages/freedom+of+information+act).

**Region 10 Regional Public Liaison:** A facilitator between citizens and EPA staff who can help solve site-related problems and communication issues. Contact Suzanne Powers ([powers.suzanne@epa.gov](mailto:powers.suzanne@epa.gov)) at (360) 753-9475.

**Environmental justice** – The EPA's goal is to provide an environment where all people enjoy the same degree of protection from environmental and health hazards and equal access to the decision-making process to maintain a healthy environment in which to live, learn and work. Contact our environmental justice staff for more information and resources: [yosemite.epa.gov/r10/ocrej.nsf/Environmental+Justice/EJ-Contacts](http://yosemite.epa.gov/r10/ocrej.nsf/Environmental+Justice/EJ-Contacts).